REMARKS

Responsive to the Office Action mailed September 8, 2006, Applicants provide the following. No claims have been amended, and therefore, sixteen (16) claims remain pending in the application: Claims 1-16. Reconsideration of claims 1-16 in view of the remarks below is respectfully requested.

Initially, Applicants acknowledge with appreciation the Examiner's willingness to take part in the telephonic interview on November 3 and 7, 2006, and for his input and suggestions.

By way of this response, Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone Thomas F. Lebens, Attorney for Applicants at (805) 541-2800 so that such issues may be resolved as expeditiously as possible.

Summary of Applicant Initiated Examiner Interview

1. Per 37 CFR § 133(b), the following is a brief summary of the Examiner interview conducted November 3, 2006 and continued on November 7, 2006 via telephone between Steven M. Freeland, Attorney of Record, and Examiner Choi.

Independent claim 1 was discussed in reference to the 35 U.S.C. §102(e) over both U.S. Patent No. 6,886,962 (Suehiro) and over U.S. Patent No. 6,926,435 (Li).

Regarding Suehiro, Applications' representative demonstrated that the Suehiro patent teaches away from at least a reflective base that reflects a first real image as recited in claim 1. Specifically, Applicants' representative pointed out that the Suehiro patent describes that:

> **all light** emitted from the light source 2 and reflected by the reflecting surface 8a is condensed into the optical opening portion 10a and then radiated out through the optical opening portion 10a … **all light** emitted from the light source 2 and reflected by the reflecting surface 8b is condensed into the optical opening portion 10b and then radiated out through the optical opening portion 10b" (Suehiro, col. 10, lines 8-14, emphasis added).

As such, the Suehiro patent specifically teaches away from at least light from a reflective base reflecting a real image of the first light source as recited in claim 1. Instead, the Suehiro patent expressly teaches away from directly light to a reflective base and instead directs all light through optical openings. Therefore, the Suehiro patent fails to teach each limitation as recited and does not anticipate at least claim 1.

It was also demonstrated that the Li patent does not teach at least a reflective base that reflects a first real image of the first light source as recited in claim 1. In the rejection the office action cited elements 2, 3, 5, 2004, 2006. However, these elements do not reflect a real image of the first source. Instead, the Li patent directs light away from the light source and not toward a reflective base as claimed. Further, the Li patent fails to each or suggest that the elements 2, 3, 5, 2004 or 2006 are reflective, and instead, describes elements 2, 2004 and 2006 as a substrate but does not suggest this is reflective, elements 3 and 5 as metal tracks but does not suggest they are reflective and even if they are, arguendo, partially reflective, there is not suggestion that these reflect a real image of the first light source. Therefore, the Li patent fails to teach or suggest each limitation as recited in claim 1.

Still further with respect to the Li patent, Examiner Choi discussed FIG. 3 of the Li patent, however, FIG. 3 does not teach or suggest a reflective base as claimed. Instead, the Li patent with respect to FIG. 3 teaches away from a reflective base as the Li patent specifically states at column 5 line 67 through column 6 lines 5 that the "first light pipe 312 having a first input end 314 located proximate to second focal point 310 to collect substantially all of radiation 308, and a first output end 316 through which substantially all of radiation 308 is transmitted" (emphasis added). Therefore, the Li patent with respect to FIG. 3 teaches away from at least the first light pipe 312 being a reflective base that reflects a real image of the first light source in that this light pipe is intended to capture all of the light. Even if, arguendo, some of the

light is not captures, the Li patent fails to suggest or teach that there is a reflective base or that a real image is reflected.

Therefore, Applicants' representative demonstrated that at least the Suehiro and Li patents do not anticipate at least claim 1, and instead teach away from the apparatus as recited in claim 1.

Examiner Choi suggested there may be some uncertainty in the claim language and proposed an amendment to claim 1 that he believed would clarify the claims. Applicants' representative disagreed that the claim was uncertain and demonstrated that at least some of the proposed amendments may introduce some ambiguity relative to some of the limitations. Further, any rejection based on uncertainty would be new grounds of rejection that would have to be presented in a non-final office action.

No exhibits were presented. No agreement was reached and Examiner Choi requested these arguments be presented in a response stating that he would give them full consideration when further evaluating the applied references.

Claim Rejections - 35 U.S.C. §102

2. Claims 1-7, 9, 10, 13 and 16 stand rejected under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 6,886,962 (Suehiro). Applicants respectfully traverse these rejections as the Suehiro patent fails to expressly or inherently describe each and every element as set forth in the claims.

Specifically, the Suehiro patent fails to describe or suggest at least a reflective base or a reflective that at least "reflects the light of the first real image" as recited in claim 1. The office action equates elements "4c and/or 9, 19 and 104 107a, 23c" of Suehiro to the claimed reflective base (office action, page 2). However, the Suehiro patent specifically states that:

> **all light** emitted from the light source 2 and reflected by the reflecting surface 8a is condensed into the optical opening portion 10a and then radiated out through the optical opening portion 10a … all

> light emitted from the light source 2 and reflected by the reflecting surface 8b is condensed into the optical opening portion 10b and then radiated out through the optical opening portion 10b" (Suehiro, col. 10, lines 8-14, emphasis added)

Therefore, the elements 4c and/or 9 are not and cannot be a reflective base that reflects a real image as recited in claim 1 at least because these elements do not receive light and instead all of the light from the source 2 is reflected to pass through the optical opening portions 10a and 10b formed in the shielding member 9.

The Suehiro patent similarly recites with respect to Figures 3A-C that the shield 19 is not and cannot be equated to a reflective base because **all** light from source 2 is direct through the optical opening portions 20a-d formed in the shield 19 (see col. 12, lines 46-59). Similarly, Suehiro in describing FIGS. 4-7 states that "all light emitted from the light source 110 and reflected by the reflecting mirror 106 is radiated out through the optical opening portion 102" (Suehiro, col. 15, lines 40-43, emphasis added) teaching away from the elements 104 and 107a reflecting a real image. Further, element 104 is a "transparent glass plate" and Suehiro fails to teach or suggest that any light is reflected by the transparent glass plate or that a real image is directed to the transparent glass plate and reflected by the transparent glass plate. Further, Suehiro teaches away from element 104 reflecting light in that all light passes through the transparent glass plate 104 and optical opening portion 102. Thus, these elements are not and cannot be equated to a reflective base as recited in claim 1.

Further with regard to at least element 23c, this is described in Suehiro as "a concaved reflecting mirror 23c" (Suehiro, col. 1, lines 36-37), with no further descriptions. This is not a base as recited in claim 1 that receives real image, and there is no discussion or teaching that element 23c reflects a real image as recited in claim 1. Further, the element 23c is part of the LED light source to direct light away from the light source, and would not receive a real image. Additionally, the Suehiro patent fails to teach or suggest that element 23c reflects a real image of the first light source as

claimed. Therefore, the Suehiro patent fails to teach or suggest each limitation as recited in claim 1 and thus, claim 1 is not anticipated by the Suehiro patent.

Still further, as presented in the previous response, elements 4c, 9, 19 and 104 of Suehiro are not reflective bases, and further are not reflective bases that reflect a first real image as claimed. Instead, regarding at least element "4c" the Suehiro patent does not describe or suggest that the mirror 4c receives a real image or reflects a real image. Further, it is the purpose of the Suehiro patent to direct light away from the light source and through optical opening portions 10a-b and 20a-d. Elements "9" and "19" are light shielding members and do not receive or reflect a real image, and instead these shielding members include slots 10a-b and 20a-d through which "all" of the light is directed. Therefore, these shielding members do not reflect a real image, and instead all light is directed away from the light shields 9 and 19 and through openings 10 and 20. The element "104" is a "transparent glass plate" allowing light to pass through, and the Suehiro patent fails to suggest that a real is directed to or reflected by the transparent glass plate 104.

Additionally, the Suehiro patent does not describe at least creating a first real image of the source because the Suehiro patent requires long concave surfaces, e.g., 8a and 8b forming "a cylindrical surface in which a part of an ellipse with the light source 2 and the optical opening portion 10a as its two focal points is extended in the lengthwise direction of the optical opening portion 10a" (Suehiro, col. 9, line 61 – col. 10, line 14). Applicants further submit that such long concave surfaces 8a-b, 18a-d and 106 would not produce a real image. Additionally, these cylindrical surfaces longitudinally extend along X axis and therefore, create a ribbon of reflected light and not a "real image" of the source. Therefore, the Suehiro patent does not describe and instead teaches away from generating a real image and directing the real image to a reflective base.

As set forth at MPEP Section 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently

described, in a single prior art reference. The Suehiro patent fails to expressly or inherently describe each and every element of at least independent claim 1. Therefore, claim 1 is not anticipated by the Suehiro patent.

Additionally, MPEP Section 2111 specifically states that "[d]uring patent examination, the pending claims must be 'given *>their< broadest reasonable interpretation consistent with the specification'" (citing, In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000) emphasis added), and continues stating "[c]laims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'" (citing 710 F.2d at 802, 218 USPQ at 292 (quoting In re Okuzawa, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976)) (emphasis in original). Therefore, based on the fact that one skilled in the art would understand the meaning of the claim language and that the claim must be interpreted in light of the specification, the Suehiro patent fails to teach or suggest at least reflecting a real image.

Claims 2-16 depend from claim 1. Therefore, claims 2-16 are also not anticipated by the Suehiro patent due at least to their dependency on claim 1.

Regarding at least claim 3, the Suehiro patent does not expressly or inherently teach at least that a "second focus is further positioned below the reflective base" or that the second focus is "below the reflective base at a height below a surface of the reflective base equal to a height of a light emitting surface of the first light source from the surface" as recited in claim 3. The office action cites column 12, lines 10-45 of the Suehiro patent. However, this portion of the Suehiro patent does not teach or suggest at least a "second focus [that] is further positioned below the reflective base" or the second focus being "below the reflective base at a height below a surface of the reflective base equal to a height of a light emitting surface of the first light source from the surface" as recited in claim 3. Instead, column 12, lines 10-45 only describe elongating focal points. Specifically, the Suehiro patent states "two focal points is extended in the lengthwise direction of the optical opening portion" for opening

portions 20a-20d (Suehiro, col. 12, line 34-36). Therefore, the Suehiro patent does not expressly or inherently describe each and every element as recited in claim 3, and thus, claim 3 is not anticipated by the Suehiro patent.

Regarding claim 4, the Suehiro patent does not describe at least "reimaging reflector comprises a first sector of a first prolate ellipsoid and a second sector of a second prolate ellipsoid" as recited in claim 4. Instead, Suehiro only describes extending the surface, not providing a prolate ellispoid. Therefore, claim 4 is also not anticipated by the Suehiro patent.

Regarding at least claims 9, 10 and 13, the Suehiro patent does not describe a lens as claimed. The office action equates element 11 of the Suehiro patent to the claimed "lens". However, element 11 is a "shielded reflective LED 11" (Suehiro, col. 13, line 43), and not a lens as claimed. Further, the LED 11 does not receive the real image as recited in claims 9, 10 and 13, and instead emits light through optical opening portions 20a-d. Therefore, claims 9, 10 and 13 are also not anticipated by the Suehiro patent.

Further, Applicants respectfully request the Examiner clarify the source of the Figure on the left as shown on page 3 of the office actions mailed September 8, 2006 (and also included in the office action mailed February 24, 2006). Applicants could not identify this Figure in the Suehiro patent. Further, Applicants can find no indication to reference numerals 12-15 in the Suehiro patent, and further reference numeral 11 in the left figure depicted in the office action is repeated in the figure on the right in the office action referring to a different structure.

3. Claims 1-3, 8-12 and 16 stand rejected under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 6,926,435 (Li). Applicants respectfully traverse these rejections as the Li patent fails to expressly or inherently describe each and every element as set forth in the claims.

The office action suggests that the Li patent describes a "reflective base" citing elements "2, 3, 5, 2004, 2006; 'metal track.'" However, none of these elements are a reflective base and the Li patent fails to teach or suggest at least that these elements reflect a real image as recited, for example, in claim 1. Specifically, elements 2 and 2006 (which includes 2004) are substrates upon which the LED is mounted and are not reflective. Nowhere in the Li patent is it suggested that these substrates are reflective. Further, there is no teaching or suggestion in the Li patent that the 2, 2006 and 2004 elements reflect a real image. Instead, the Li patent specifically teaches away from these elements reflecting a real image as the light from the source comprising the substrates 4 and 2006 is specifically directed away from the light source and thus not reflected to these substrates to receive a real image or to reflect a real image. This is clearly shown in at least FIGS. 4 and 8 where, for example, the Li patent shows and describes that the light is emitted from the source at a focal point 412 and directed to a distant location 414. Therefore, light is not directed to the substrate 2 or 2006 and the Li patent fails to teach or suggest that these substrates 2 and 2004, 2006 reflect a real image or that these substrates receive light reflected from a reimaging reflector.

Further, elements 3 and 5 are only described in the Li patent at column 2, lines 22-31 as "metal tracks 3, 5 or rails [that] provide an electrical connection". The Li patent fails to teach or suggest at least that these metal tracks 3 or 5 are reflective and further fails to teach or suggest that these metal tracks 3 and 5 reflect a real image as recited in at least claim 1. Sill further, there would be no benefit according to the Li patent to direct light reflected from a reflector 306 back to metal electrical tracks 3 or 5 of the LED 1, in that at least there would be no control over the reflections from elements 3 or 5 and thus, the light would not be directed to the intended distant location. Therefore, the elements "2, 3, 5, 2004, 2006; 'metal track'" relied on by the office action are not a reflective base as recited in claim 1, cannot be equated to a reflective base and fail to reflect a real image. Thus, claim 1 is not anticipated by the Li patent as the Li patent fails to teach or suggest each limitation claimed.

Additionally, the Li patent fails to teach or suggest establishing a real image adjacent a first light source, and instead reflects light away from the light source to a remote point (see at least FIGS. 4 and 8-19 for example). It is the intended purpose of the Li patent to reflect light away from the light source. Further with respect to at least FIG. 3 of the Li patent, the Li patent teaches away from a reflective base and specifically states at column 5 line 67 through column 6 lines 5 that the "first light pipe 312 having a first input end 314 located proximate to second focal point 310 to collect substantially all of radiation 308, and a first output end 316 through which substantially all of radiation 308 is transmitted" (emphasis added). Therefore, the Li patent teaches away from the first light pipe 312 being a reflective base that reflects a real image of the first light source in that this light pipe is intended to capture all of the light. Even if, arguendo, some of the light is not captured by the light pipe 312, the Li patent fails to suggest or teach that there is a reflective base or that a real image is reflected and only minimal amounts of light would not be captures as the light pipe captures substantially all the light.

The Li patent does not expressly or inherently describe each and every element of at least claim 1, and instead teaches away from claim 1. Thus, claim 1 is not anticipated by the Li patent.

Claims 2-3, 8-12 and 16 depend from claim 1. Thus, claims 2-3, 8-12 and 16 are not anticipated by the Li patent, due at least to their dependency on allowable claim 1.

Regarding at least claim 3, the Li patent does not expressly or inherently teach a reflective base or that a "second focus is further positioned below the reflective base" or that the second focus is "below the reflective base at a height below a surface of the reflective base equal to a height of a light emitting surface of the first light source from the surface" as recited in claim 3. Therefore, claim 3 is also not anticipated by the Li patent.

Claim 8 recites "a tailored free-form exit face positioned at least partially about the light source such that the percentage of light reflected by the reimaging reflector and light emitted from the source not reflected by the reimaging reflector is emitted from the exit face establishing an output illumination that meets a predefined prescription." The office action suggests that the Li patent teaches such a tailored free-form exit face, however, fails to provide any support or specify where in the Li patent such a tailored free-form exit face is described. Applicants respectfully submit that the Li patent does not teach the tailored free-form exit face as recited in claim 8, and thus, at least claim 8 is not anticipated by the Li patent.

In rejecting claims 9-12 the office action recites elements 1100, 1200, 1300 and 1400. The office action, however, also equates pieces of theses elements as other elements of claim 1. Therefore, the office action is effectively reading claim limitations out of the claims. For example, the Li patent does not teach or suggest a lens positioned proximate the light source as recited in claim 9; a lens that comprises the reimaging reflector as recited in claim 10; lens comprising a reflective surface, reflector array, mirrored surface and output surface as recited in claim 11; or a lens comprising the reimaging reflector, input surface defining a cavity that receives the first light source, reflective fingers, reflective folding face and exit face as recite in claim 12. The Li patent does not describe a lens as recited in claims 9-12. Therefore, the Li patent does not anticipate claims 9-12.

4. Claims 1 and 13-15 stand rejected under 35 U.S.C. § 102(e), as being anticipated by published U.S. Patent Application publication No. 2004/0189933 (Sun et al.). Applicants respectfully traverse these rejections as the Sun reference fails to expressly or inherently describe each and every element as set forth in the claims.

For example, the "down-going light" of paragraph 0073 of the Sun reference as cited in the office action does not establish "a first real image of the first light source adjacent the first light source" as recited in claim 1. Further, the lens 120

is designed to pass the light into and through the lens, and thus, does not reflect light to produce a real image. Still further, the Sun patent does not describe relative to FIG. 12 the generation of a real image or the reflecting of the real image by the base. Therefore, the Sun reference does not describe each limitation of at least claim 1, and thus, claim 1 is not anticipated by the Sun reference.

Claims 13-15 depend from claim 1, and thus, claims 13-15 are also not anticipated by the Sun reference due at least to their dependency on allowable claim 1.

Applicants further respectfully request that if a further office action maintaining one or more of the rejections is issued that the office action address all of the relevant arguments presented by Applicants so that Applicants can fully understand the grounds for rejection and the reasoning that the arguments presented were not persuasive (MPEP 707.07(f)).

CONCLUSION

Applicants submit that the above remarks demonstrate that the pending claims are not anticipated by the cited references and are in a condition for allowance. Therefore, a Notice of Allowance is respectfully requested.

Respectfully submitted,

Dated: November 8, 2006

/Steven M. Freeland/

Steven M. Freeland
Reg. No. 42,555
Attorney for Applicants
(858) 552-1311

Address all correspondence to:
Sinsheimer Juhnke Lebens & McIvor
Thomas F. Lebens
1010 Peach Street
P.O. Box 31
San Luis Obispo, CA 93401
805-541-2800